

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/991,439	11/16/2001	In Hwan Choi	2080-3-52	3995	
35884	7590 08/05/2005	EXAMINER			
LEE, HONG, DEGERMAN, KANG & SCHMADEKA, P.C. 801 SOUTH FIQUEROA STREET 14TH FLOOR LOS ANGELES, CA 90017			AGHDAM, FRESHTEH N		
			ART UNIT	PAPER NUMBER	
			2631	 -	
			DATE MAILED: 08/05/2005	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicat	ion No.	Applicant(s)			
Office Action Summary		09/991,4	139	CHOI ET AL.			
		Examine	;r	Art Unit			
		Freshteh	N. Aghdam	2631			
7 Period for R	he MAILING DATE of this commur Reply	ication appears on th	e cover sheet with the c	correspondence addre	9SS		
A SHOR THE MA - Extension after SIX - If the peri - If NO per - Failure to Any reply	TENED STATUTORY PERIOD F ILING DATE OF THIS COMMUN as of time may be available under the provisions (6) MONTHS from the mailing date of this commod for reply specified above is less than thirty (5) iod for reply is specified above, the maximum start reply within the set or extended period for reply received by the Office later than three months atent term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no e nunication. s0) days, a reply within the statutory period will apply and we will, by statute, cause the ap	vent, however, may a reply be tin atutory minimum of thirty (30) day will expire SIX (6) MONTHS from plication to become ABANDONE	nely filed s will be considered timely. the mailing date of this comn D (35 U.S.C. § 133).	nunication.		
Status							
1)⊠ R€	esponsive to communication(s) file	ed on <i>18 May 2005</i> .					
• —	This action is FINAL . 2b) This action is non-final.						
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition	of Claims						
4a) 5)⊠ Cl 6)□ Cl 7)□ Cl	aim(s) is/are pending in the Of the above claim(s) is/a aim(s) <u>1-9</u> is/are allowed. aim(s) is/are rejected. aim(s) is/are objected to. aim(s) are subject to restricts	re withdrawn from co					
Application	Papers						
10)⊠ The Ap Re	e specification is objected to by the drawing(s) filed on 16 November plicant may not request that any objected to placement drawing sheet(s) including the oath or declaration is objected to	er 2001 is/are: a) action to the drawing(s) the correction is requ	be held in abeyance. Secured if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR	1.121(d).		
Priority und	ler 35 U.S.C. § 119						
a)	Certified copies of the priority	documents have be documents have be of the priority docum onal Bureau (PCT Ru	en received. en received in Applicati nents have been receive ule 17.2(a)).	ion No : ed in this National St	age		
Attachment(s)	References Cited (PTO-892)		4) Interview Summary	(PTO 413)			
2) Notice of 3) Informati	References Cited (PTO-892) Draftsperson's Patent Drawing Review (I on Disclosure Statement(s) (PTO-1449 or of the Drawing Date		Paper No(s)/Mail D: 5) Notice of Informal F 6) Other:	ate	52)		

DETAILED ACTION

Page 2

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

Knutson et al (US Patent 6,788,710) teach a VSB transmission system comprising a supplemental data processor that includes a supplemental data, encoding, inserting an auxiliary packet, inserting a null packet, and inserting an MPEG header and the multiplexer that multiplexes the supplemental data and the MPEG data. Kumar (US 5,966,401) teaches a data randomizer, a Reed-Solomon encoder, and an interleaver. Combes et al (US 6,704,366) teach a RS encoder, an interleaver, and a convolutional encoder in the transmitting section. The prior art of record fails to teach a data decoding part processing the data processed in said supplemental data symbol processor including symbol-byte converting, data de-interleaving, eliminating said Reed-Solomon parity added in the data encoding part before the VSB transmitter processing.

Conclusion

This application is in condition for allowance except for the following formal matters:

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to correspond to the specification. A new set of drawings is required since figure 4

Art Unit: 2631

accoring to the specificaiton is missing and figure 4 according to the drawings corresponds to the description of figure 5 according to the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim1 is objected to because of the following informalities:

As to claim 1, "Reed-Solomon" should replace the word "Read-Solomon".

Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freshteh N. Aghdam whose telephone number is (571) 272-6037. The examiner can normally be reached on Monday through Friday 9:00-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2631

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Freshteh Aghdam

August 2, 2005

Musikevin Burd Kevin Burd Primary Examiner